## INTERNATIONAL SEARCH REPORT

tional Application No

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|--|--|-----------------------------|--|--|--|--|--|--|--|--|
| A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H01F38/14  |  |                             |  |  |  |  |  |  |  |  |
| According to International Patent Classification (IPC) or to both national classification and IPC  |  |                             |  |  |  |  |  |  |  |  |
|  | SEARCHED   |                             |  |  |  |  |  |  |  |  |
| IPC 7  | ocumentation searched (classification system followed by classification Followed By Classification System Followed By Classification Followed By Classi |                             |  |  |  |  |  |  |  |  |
|  | tion searched other than minimum documentation to the extent that s  |                             |  |  |  |  |  |  |  |  |
| EPO-In   | ata base consulted during the international search (name of data ba  | sse and, where practical,   | search terms used)   |  |  |  |  |  |  |  |
| C. DOCUMI  | ENTS CONSIDERED TO BE RELEVANT   |                             |  |  |  |  |  |  |  |  |
| Category °   | Citation of document, with indication, where appropriate, of the re-   | Relevant to daim No.        |  |  |  |  |  |  |  |  |
| х  | US 6 246 896 B1 (DUMOULIN CHARLES<br>ET AL) 12 June 2001 (2001-06-12)<br>column 4, line 66 -column 5, line<br>figure 6   |                             | 1-7  |  |  |  |  |  |  |  |
| X  | US 5 158 932 A (HIRSCHKOFF EUGENE<br>AL) 27 October 1992 (1992-10-27)<br>abstract; figure 8  | E C ET                      | 1-7  |  |  |  |  |  |  |  |
| X  | GB 1 398 224 A (KRAUTKRAEMER GMBH<br>18 June 1975 (1975-06-18)<br>the whole document   | 1)                          | 1,3  |  |  |  |  |  |  |  |
| Α  | DE 196 21 003 A (VOGT ELECTRONIC 27 November 1997 (1997-11-27) abstract; figures 1,2   | AG)                         | 1-7  |  |  |  |  |  |  |  |
|  |  |                             |  |  |  |  |  |  |  |  |
|  |  | •                           |  |  |  |  |  |  |  |  |
| X Furth  | er documents are listed in the continuation of box C.  | X Patent family m           | embers are listed in annex.  |  |  |  |  |  |  |  |
| Special categories of cited documents:   |  |                             |  |  |  |  |  |  |  |  |
| "A" docume<br>conside<br>"E" earlier d   | thed after the international filing date not in conflict with the application but the principle or theory underlying the   |                             |  |  |  |  |  |  |  |  |
| "L" document which may throw doubts on priority claim(s) or involve an inventive which is cited to establish the publication date of another |  |                             | ar relevance; the claimed invention and novel or cannot be considered to step when the document is taken alone |  |  |  |  |  |  |  |
| O docume   | ir relevance; the claimed invention<br>of to involve an inventive step when the<br>ed with one or more other such docu-<br>ation being obvious to a person skilled   |                             |  |  |  |  |  |  |  |  |
| P° docume<br>later th  | the same patent family   |                             |  |  |  |  |  |  |  |  |
| Date of the a  | ctual completion of the international search   | international search report |  |  |  |  |  |  |  |  |
| 29 April 2004  |  | 11/05/2004                  |  |  |  |  |  |  |  |  |
| Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  |  | Authorized officer          |  |  |  |  |  |  |  |  |
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tional Application No

| C-(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT  Category* Citation of document, with indication, where appropriate, of the relevant passages  Relevant  A US 4 838 797 A (DODIER PAUL J) 13 June 1989 (1989–06–13) the whole document |             |
|---|-------------|
| A US 4 838 797 A (DODIER PAUL J) 1- 13 June 1989 (1989-06-13) the whole document  | o claim No. |
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tional Application No

| Patent document cited in search report |    | Publication date |  | Patent family<br>member(s)  | Publication date   |
|--|----|------------------|--|---|--|
| US 6246896                             | B1 | 12-06-2001       | NONE   |   | <del> </del>   |
| US 5158932                             | A  | 27-10-1992       | US<br>AT<br>DE<br>DE<br>EP<br>JP<br>JP<br>WO<br>US | 5061680 A<br>146283 T<br>69029375 D1<br>69029375 T2<br>0436711 A1<br>4502967 T<br>3081237 B2<br>9102259 A1<br>5442289 A | 29-10-1991<br>15-12-1996<br>23-01-1997<br>28-05-1997<br>17-07-1991<br>28-05-1992<br>28-08-2000<br>21-02-1991<br>15-08-1995 |
| GB 1398224                             | A  | 18-06-1975       | NONE   |   |  |
| DE 19621003                            | Α  | 27-11-1997       | DE   | 19621003 A1   | 27-11-1997   |
| US 4838797                             | Α  | 13-06-1989       | NONE   |   |  |